REELV UN IKEP The INTERNATIONAL BUREAU NOV 1 8 2005 To:

NOTIFICATION CONCLARED SIX OLOF TAYLOR & ZEFMANLED
TRANSMITTAL OF COPY OF INTERNATIONAL
PREI IMINADA DEPONDA AND THE PREI IMINADA DEP PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)

(PCT Rule 44bis, 1(c))

FAHMI, Tarek 12400 Wilshire Boulevard Seventh Floor Los Angeles, CA 90025-1030 ETATS-UNIS D'AMERIQUE

Date of mailing (day/month/year) 10 November 2005 (10.11.2005)

Applicant's or agent's file reference 6317P100PCT

IMPORTANT NOTICE

International application No. PCT/US2004/012468

International filing date (day/month/year) 22 April 2004 (22.04.2004)

Priority date (day/month/year) 25 April 2003 (25.04.2003)

Applicant

APPLIED MATERIALS ISRAEL, LTD, et al.

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation

Entered in FIP on: NO DOKKETING REQUESTA Docketing Department

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LAFIF DEP'L

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

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### ATENT COOPERATION TREAT

## **PCT**

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 6317P100PCT	FOR FURTHER ACTION	See item 4 below	
International application No. PCT/US2004/012468	International filing date (day/month/year) 22 April 2004 (22.04.2004)	Priority date (day/month/year) 25 April 2003 (25.04.2003) ]	
International Patent Classification (IPC) or national classification and IPC 7 H01J 37/145			
Applicant APPLIED MATERIALS ISRAEL, LTD.			

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).			
2.	This REPORT consists of a total of 9 sheets, including this cover sheet.			
	In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.			
3.	This report contains indications relating to the following items:			
	Box No. I	Basis of the report		
	Box No. II	Priority		
	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability		
	Box No. IV	Lack of unity of invention		
	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
	Box No. VI	Certain documents cited		
	Box No. VII	Certain defects in the international application		
	Box No. VIII	Certain observations on the international application		
4.	The International Bureau will conot, except where the applicant n date (Rule 44bis .2).	mmunicate this report to designated Offices in accordance with Rules 44bis;3(c) and 93bis.1 but takes an express request under Article 23(2), before the expiration of 30 months from the priority		

_	Date of issuance of this report 28 October 2005 (28.10.2005)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer  Dorothée Mülhausen
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Form PCT/IB/373 (January 2004)

### PATENT COOPERATION TREA. .

REG'B 2 8 OCT 2004 From the INTERNATIONAL SEARCHING AUTHORITY To: WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY see form PCT/ISA/220 (PCT Rule 43bis.1) Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet) FOR FURTHER ACTION Applicant's or agent's file reference See paragraph 2 below see form PCT/ISA/220 Priority date (day/month/year) International filing date (day/month/year) International application No. 25 04 2003 22.04.2004 PCT/US2004/012468 International Patent Classification (IPC) or both national classification and IPC H01.137/145 Applicant APPLIED MATERIALS ISRAEL, LTD.

This opinion contains indications relating to the following items:

Box No. 1

Basis of the opinion

N Box No. II

Priority

Box No. III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

☐ Box No. IV

Lack of unity of invention

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

☐ Box No. VI Certain documents cited

Box No. VII Certain defects in the international application Box No. VIII Certain observations on the international application

FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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Authorized Officer



Oestreich, S Telephone No. +49 89 2399-7037

### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2004/012468

_	Box No	o. I Basis of the opinion		
1.	With re	gard to the language, this opinion has been established on the basis of the international application in guage in which it was field, unless otherwise indicated under this item.		
	lar (u	is opinion has been established on the basis of a translation from the original language into the following iguage , which is the language of a translation furnished for the purposes of international search inder Rules 12.3 and 23.1(b)).		
2.	<ol><li>With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:</li></ol>			
	a. type	of material:		
		a sequence listing		
		table(s) related to the sequence listing		
	b. forn	nat of material:		
		in written format		
		in computer readable form		
	c. time	e of filing/furnishing:		
		contained in the international application as filed.		
		filed together with the international application in computer readable form.		
	, 	furnished subsequently to this Authority for the purposes of search.		
3	t c	n addition, in the case that more than one version or copy of a sequence listing andor table relating thereto as been filed or furnished, the required statements that the information in the subsequent or additional opies is identical to that in the application as filed or does not go beyond the application as filed, as ppropriate, were furnished.		

4. Additional comments:

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2004/012468

_	Bo	x No. II	Priority
1.	×		owing document has not been furnished:
		⊠.	copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).
			translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).
		Conse	quently it has not been possible to consider the validity of the priority claim. This opinion has leless been established on the assumption that the relevant date is the claimed priority date.
2		has he	onion has been established as if no priority had been claimed due to the fact that the priority claim en found invalid (Rules 43 <i>bis.</i> 1 and 64.1). Thus for the purposes of this opinion, the international ate indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2004/012468

Sox No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability			
The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:			
_	the entire international application,		
×	claims Nos. 17,23-25,27		
bec	ause:		
	the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):		
×	the description, claims or drawings (indicate particular elements below) or said claims Nos. 17,27 are so unclear that no meaningful opinion could be formed (specify):		
	see separate sheet		
	the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.		
$\boxtimes$	no international search report has been established for the whole application or for said claims Nos. 23-25		
	the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:		
	the written form		has not been furnished
	i i		does not comply with the standard
	the computer readable form		has not been furnished
			does not comply with the standard
	the tables related to the nucleot not comply with the technical re	ide a quin	andlor amino acid sequence listing, if in computer readable form only, do ements provided for in Annex C- <i>bis</i> of the Administrative Instructions.
	See separate sheet for further of	detai	ils

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2004/012468

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N) Yes: Claims

No: Claims 1.2.5.8.18-22.26

Inventive step (IS) Yes: Claims

No: Claims 3,4-16

Industrial applicability (IA) Yes: Claims 1-16,18-22,26

No: Claims

2. Citations and explanations

see separate sheet

Box No. VII Certain defects in the International application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

#### Re Item III.

- 1 Claim 17 reads "[...] the upper electrode is supplied with a positive voltage". However, a voltage can only be defined between two poles. The second point of reference (pole) for the positive voltage is not defined in claim 17, the voltage is therefore not well-defined, rendering claim 17 unclear (Art 6 PCT) to such an extent that an examination of novelty and inventive step is not feasible.
- 2 Claim 27 refers back to claim 22, which itself refers back to claim 21. In neither of the claims the "minimal energy", which is claimed to be a certain value in claim 27, is defined. Claim 27 is thus unclear (Art 6 PCT) to such an extent that an examination of novelty and inventive step is not feasible.

#### Re Item V.

1 The following document is referred to in this communication:

D1: US 6 407 388 B1 (FROSIEN JUERGEN) 18 June 2002 (2002-06-18) D2: US-B-6 407 3881 (FROSIEN JUERGEN) 18 June 2002 (2002-06-18)

D3: WO 99/46797 A (ESSERS ERIK) 16 September 1999 (1999-09-16)

### 2 INDEPENDENT CLAIM 1

2.1 The subject-matter of claim 1 is not novel in the sense of Article 33(2) PCT, because document D1 discloses (the references in parenthesis applying to this document):

An objective lens arrangement comprising a magnetic lens (11) and an electrostatic lens (10), wherein the electrostatic lens includes upper and lower electrodes (10 a, 10 b) arranged in a spaced apart coaxial relationship along an optical axis of the lens arrangement.

### 3 INDEPENDENT CLAIM 18

The only substantial difference of claim 18 with respect to claim 1 is that the upper and lower electrodes be associated with a separate voltage supply. As far as this feature is can be understood (see remarks on item VIII below), this feature is disclosed implicitly in document D1, as the electrodes would not work as electrostatic lens without voltage being supplied, thus requiring a voltage supply.

- 1 Claim 3 is drafted as being dependent on claim 1, however the additional technical feature of claim 2 (being dependent on claim 1) is present in claim 3 which therefore is dependent on claim 2 and should be drafted accordingly.
- 2 The additional technical features of claim 7 (being dependent on claim 1) appear to be identical of the additional technical features of claims 6 and 5 (claim 6 being dependent on claim 5, the latter being dependent on claim 1). Claim 7 thus needs to be deleted.
- 3 The claims do not fulfill the requirements of Rule 6.3 (b) (two part form) and Rule 6.2 (b) (reference signs).

#### Re Item VIII

- 1 In claim 18, the term "associated with a separate voltage supply" is unclear. Firstly, the meaning of "separate" is unclear, as the voltage supply of the electrodes must be connected in some way to each other to ensure defined potentials. Secondly "associated" is vague and undefined; either the electrode is connected or not to a voltage supply, association is not an issue.
- 2. In claim 26, it is not apparent which features are claimed as technical features and which are effects resulting therefrom ( " thereby reducing..."), rendering claim 26 unclear.